

Ridge-to-Reef: Hanalei Investigations

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Hanalei ahupua`a



Learning about clean water

Objectives

- ☆ Evaluate reef and watershed ecosystems for pollution sources, transport, and causes
- ☆ Develop erosion-sedimentation and water quality models that link terrestrial and marine ecosystems
- ☆ Conduct comparison of Hanalei Bay marine benthic communities between 1994 and 2004

Accomplishments

- ☆ Acquired and evaluated > 5,300 aerial images of watersheds and reefs
- ☆ Operated stream gage with sediment sampler (Station # 16103000 at <http://hi.water.usgs.gov/>)
- ☆ Evaluated coral recruitment in the outer bay compared to locations in the inner bay
- ☆ Initiated marine sedimentation measurements in this LAS site

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Significance

- ☆ Sedimentation processes are assessed relative to environmental conditions and land management within the watershed
- ☆ Implemented in coordination with the Hanalei Heritage River Hui and USCRTF. Hui steering committee includes USGS, EPA, Forest Service, State Dept. of Health, and community stakeholder groups including local businesses, taro farmers and native Hawaiians